2. Materials and Methods

2.1. Materials

We took EEG dataset “EEG Motor Movement/Imagery Dataset”[1] from PhysioNet databank[2]. In this dataset subjects performed different motor/imagery tasks (we use only motot tasks) while 64-channel EEG were recorded using the BCI2000 system [3]. In total data from 105 subjects were used, each subject has around 25 trials (variate from 22 to 26). Each subject performed two one-minute baseline runs (one with eyes open, one with eyes closed) before all trials. For authentication were used the following tasks: a target appears on either the left or the right side of the screen. The subject opens and closes the corresponding fist until the target disappears. Then the subject relaxes.

2.1.1 EEG recording and preprocessing